Recent ornithological observations from São Tomé and Príncipe Islands

By Dave E. Sargeant

Résumé: Deux voyages aux îles de Sao Tomé en décembres 1989 et en août 1991 et un voyage à Principe en août 1991 ont permis d'observer toutes les espèces endémiques connues de ces deux îles. Cela incluait la 'redécouverte' du Grosbec de Sao Tomé, *Neospiza concolor*, connu uniquement d'après trois spécimens obtenus en 1888 et en 1890 et qui, selon les critères de CITES, serait maintenant classé dans la catégorie Disparus. Ils ont permis les premiers relevés précis de la race endémique *rothschildi* à Principe de l'Ibis olivâtre, *Bostrychia olivacea*, qui n'avait pas été rapportée depuis le début de ce siècle et qui, selon les mêmes critères, était considérée comme disparue. Toutes les espèces endémiques paraissaient prospérer dans des habitats non perturbés. Etant donné la superficie relativement étendue de fôret primaire, pour la plupart inaccessible, qui subsiste, une destruction de l'habitat, qui menacerait la survie de ces espèces, parait peu probable actuellement.

The birds of the islands of São Tomé and Príncipe, situated 250km west of Africa in the Gulf of Guinea, have been studied on many occasions. However, apart from the lengthy studies by de Naurois during 1963-1973, most observations have been of the 'expedition' type. This has led to a patchy understanding of the birds of São Tomé and Príncipe, the result of which is that the status of many species is very unclear. In addition, recent observations have been limited, since following

Table 1 Species endemic to São Tomé and Príncipe Table 1 Espèces endémiques à Sao Tomé et Principe

Species	São Tomé	Príncipe
Bostrychia bocagei	Х	
Treron sanctithomae	Х	
Columba malherbii	Х	Х
Columba thomensis	Х	
Otus hartlaubi	X X	
Otus sp.		Х
Chaetura thomensis	х	X X
Lanius newtoni	X X	
Lamprotornis ornatus		Х
Oriolus crassirostris	Х	
Turdus olivaceofuscus	X	Х
Horizorhinus dohrni		X X
Prinia molleri	Х	
Amaurocichla bocagei	Х	
Terpsiphone atrochalybeia	X X	
Nectarinia newtoni	Х	
Nectarinia hartlaubi		Х
Nectarinia thomensis	Х	
Zosterops ficedulinus	X X	Х
Speirops lugubris	Х	
Speirops leucophaeus		Х
Serinus rufobrunneus	Х	X X
Neospiza concolor	X X	
Ploceus grandis	Х	
Ploceus princeps		Х
Ploceus sanctithomae	Х	

independence in 1975 the islands were virtually closed to the rest of the world until the late 1980s.

There is a total of 25 endemic species known from both islands (Table 1). Twenty occur on São Tomé, and 11 on Príncipe. Of the 20 on São Tomé 14 are single island endemics, while on Príncipe there are five. Most of the endemic species are common or fairly common, but certain species are rare and have not been seen for lengthy periods.

Seven species are currently treated in the *ICBP/ IUCN Red Data Book*¹: *Bostrychia bocagei, Columba thomensis, Otus hartlaubi, Lanius newtoni, Amaurocichla bocagei, Zosterops ficedulinus* and *Neospiza concolor.* This number was increased to nine in the 1988 update² with the inclusion of *Nectarinia thomensis* and *Speirops leucophaeus.* It is this very high degree of endemism combined with the number of *Red Data Book* species which has led to the forests of southwest São Tomé being considered as the second most important forest area for threatened bird species in the Afrotropical and Malagasy region³.

An overview of the history of ornithological investigation of the two islands is given in Jones and Tye⁴. Only a summary of the main surveys or expeditions of note is presented here.

1847 - 1850 Carl Weiss collected specimens for the Hamburg Museum.

- 1885 1895 Francisco Newton collected for the Lisbon Museum. His records included the first and last sightings of *Neospiza concolor*.
- 1899 1901 Leonardo Fea collected for the Genoa Museum.
 1000 Boyd Alexander collected for the British
- 1909 Boyd Alexander collected for the British Museum.

1928 - 1929	Jose Correia collected for the American	
	Museum. His records included the last of	
	the early sightings of Lanius newtoni.	
1949	Oxford University Expedition.	
1954	A Portuguese scientific mission.	
1963 - 1973	Several long periods spent by R. de	
	Naurois resulting in many scientific	
1002 1005	papers.	
1983 - 1985	Günther and Feiler.	
1987	S. Eccles spent a week in April for the	
	World Bank. His observations included	
	the possible rediscovery of Amauro-	
	cichla bocagei.	
1987	P. J. Jones and A. Tye spent five weeks	
	studying both islands for ICBP ⁴ .	
1988	P. J. Jones and J. Burlison on an EC/IUCN expedition.	
1990	University of East Anglia Expedition.	
	Found all the endemic species with the	
	exception of Neospiza concolor ⁵ .	
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Observations

Observations were made on two trips. The first, from 23-25 December 1989, comprised myself and P.D. Alexander-Marrack. The second from 2-11 August 1991 included myself, T. Gullick, K. Gullick, J.C. Sinclair, and D. Turner.

In view of the limited time available, the December 1989 trip concentrated on the high altitude primary forest at Lagoa Amelia, on São Tomé, with two days spent trying, without success, to locate *Nectarinia thomensis*. This species was claimed to occur there by our local guide, and was indeed subsequently located there by the University of East Anglia (UEA) expedition in 1990⁵. Owing to poor weather further south, the other day was spent mainly in the drier savanna areas between São Tomé Town and Praia das Conchas in the north-west.

The ten-day trip in August 1991 capitalised on the ornithological and logistical information gathered by the 1990 UEA expedition. We spent a total of five days camped along the Rio Xufexufe in the largely inaccessible south-west of São Tomé island. A four-wheeldrive vehicle was used from São Tomé Town to Santo Antonio, after which local porters transferred equipment along the coast and then about 3km up the Rio Xufexufe to a base camp which was used as a central location from which to explore. This base camp was situated at 40m altitude within undisturbed primary rain forest. Working the area was slow as the river course was comprised entirely of algae-covered volcanic boulders, with almost sheer forested slopes on either side. A total of 7km of river was surveyed (5km of the main Rio Xufexufe and 2km along larger tributaries), from sea level to an altitude of 100m. We reached higher altitude forest on the north-western side of the Rio Xufexufe on three occasions by climbing the valley sides and walking along the less steep ridges. In this way, we covered forest from 40-380m altitude. For the rest of the time we spent one day each at Lagoa Amelia and the area around Praia das Conchas.

During the two days on Príncipe, we covered cocoa shade forest between the main town, Santo Antonio, and Bela Vista, as well as some remaining primary forest above Bela Vista along the Rio Papagaio, and further north toward the communications dish above Santo Antonio. In addition, we visited the offshore islet of Pedra da Galé one afternoon by boat. We also passed the Tinhosas Islands, to the southeast of Príncipe, on the return flight to São Tomé.

We recorded a total of 66 species, 54 on São Tomé and 35 on Príncipe. All the 25 endemic species, including all 20 species known from São Tomé, were recorded but only seven of the eleven known to be located on Príncipe. The four which we could not locate on Príncipe were *Columba malberbii*, *Otus* sp, *Turdus olivaceofuscus*, and *Zosterops ficedulinus*. The first certainly survives there⁴ and there seems to be a good chance that the others do as well in the undisturbed forests of the south-west of the island. We taperecorded song and calls of most of the endemic species, and have lodged these recordings with the British Library of Wildlife Sounds, London.

Two basic maps were used. The best overview, covering São Tomé and Príncipe on one sheet at a scale of 1:75,000, is the locally available *Ilhas de São Tomé e Príncipe* (produced by the Centro de Informação e Tourismo de São Tomé e Príncipe). For the Rio Xufexufe, we made use of a very detailed 1:25,000 series labelled Carta de São Tomé. Levantomento Aeropotogrametrico 1958. Folha 3, produced by Ministério do Ultramar, Junta de Investigaçãos do Ultramar.

Systematic List

Nomenclature and sequence follow Clements⁶, with a few exceptions which are discussed under the relevant species. Where the names are different, the *Birds of Africa*^{7,8,9} name is also given in brackets.

White-tailed Tropicbird *Phaethon lepturus* On São Tomé, a few observed on several occasions (23/12/89) and (2/8/91) from the eastern coastal road, either passing along the coast or flying inland over forested areas. On Príncipe, at least ten around the offshore islets of Pedra de Galé (9/8/91) and the Tinhosas Islands (10/8/ 91).

Brown Booby Sula leucogaster On São Tomé, one offshore of São Tomé Town (24/12/89) and two off

shore of Santo Antonio (2/8/91). On Príncipe, at least six off the northern coast between Santo Antonio and Pedra de Galé (9/8/91).

Long-tailed Cormorant *Phalacrocorax africanus* On São Tomé, a total of ten birds, mainly singles, recorded along rivers from the eastern coast road.

Cattle Egret *Bubulcus ibis* Fairly common on both São Tomé and Príncipe in the lowlands, and occurring around plantations above 1000m at Nova Moca on São Tomé.

Green Heron *Butorides striatus* On São Tomé, three along rivers and streams in the northern part of the island (24/12/89) and six over two days along the Rio Xufexufe (3-4/8/91). On Príncipe, two recorded along the Rio Papagaio (10/8/91).

Western Reef Heron *Egretta gularis* On São Tomé, fairly common along rivers, with a maximum of seven birds on coastal rocks at Santo Antonio (7/8/91). On Príncipe, only a single bird along the Rio Papagaio (9-10/8/91). White phase birds comprised about 60 per cent of the population.

Olive Ibis *Bostrychia olivacea* On Príncipe, two birds seen flying low over forest just below the communications tower 4-5 km from Santo Antonio (10/8/91). This is the first sighting of the endemic Príncipe subspecies *B.o. rothschildi* since early this century, and it had been postulated that this subspecies was extinct^{7,10}.



Dwarf Olive Ibis *Bostrychia bocagei* by S. Mark Andrews

Dwarf Olive Ibis *Bostrychia bocagei* Species endemic to São Tomé, although usually regarded as a subspecies of Olive Ibis *B. olivacea* (eg *Birds of Africa*⁷). At least three birds along forested ridges on the western side of the Rio Xufexufe (5/8/91) and (6/8/ 91). Another bird heard calling from the ridge north at Roca Jou (2/8/91) as it was flushed by dogs used by local people for hunting pigs, and three other records of birds calling from the forested areas along the Rio Xufexufe between 4/8/91 and 6/8/91. Judging from the three individuals seen, this species seems to prefer feeding on the flatter areas of the forest floor, and indeed the second locality where this species was found was chosen as an obvious 'plateau' area within the mostly very steep valley flanks. These flatter areas were also heavily rooted over by introduced Wild Boars Sus scrofa, and it could be that this also attracts the ibises, which presumably feed on the insects exposed. All observations were from primary forest between 210 - 300m altitude. From the one individual seen well from 25m (which was perched in a tree about five metres above eye level) we took the following description: size small for a Bostrychia ibis (it was initially mistaken for a Maroon Pigeon Columba thomensis). Upperparts dull olive-brown with no metallic gloss. A fine pale line across secondary coverts. Fine white tips to the crest and a wide pale streak above and below the eye. Under parts as upper parts, though with belly and undertail blackish, and some fine white flecking on the flanks. Bill flesh-orange, short, thick-based and not strongly decurved. Legs flesh coloured. In flight, call a harsh karh karh followed by a similar karh karh.

Black Kite *Milvus migrans parasitus* On São Tomé, a few birds of the distinct yellow-billed African race *parasitus* seen daily in coastal areas, and frequently seen feeding offshore. On Príncipe, four around Santo Antonio (9-10/8/91).

Harlequin Quail *Coturnix delegorguei* On São Tomé, a single flushed in the northern savannas near Guadalupe (23/12/89), and two in flight across the road on the outskirts of São Tomé Town (8/8/91).

Common Moorhen *Gallinula chloropus* On São Tomé, one where the Rio Abade crosses the eastern coast road (23/12/89), and one heard Porto Alegre (7/ 8/91). On Príncipe, one Santo Antonio (10/8/91).

Whimbrel *Numenius phaeopus* On São Tomé, two in the bay of São Tomé Town (23/12/89), and two along the Rio Xufexufe (3/8/91) and (7/8/91), and a further two on the beach at Praia das Conchas (8/8/91). On Príncipe, one feeding on the sandy beach of Santo Antonio (9/8/91).

Common Sandpiper *Tringa hypoleucos* On São Tomé, up to five seen daily in coastal areas (23-25/12/ 89), two at Santo Antonio (2/8/91) and one at the mouth of the Rio Xufexufe (7/8/91).

Bridled Tern *Sterna anaethetus* On Príncipe, one flying around the headland at Praia Grande (9/8/91).

Sooty Tern *Sterna fuscata* On São Tomé, a large flock of *Sterna* terns seen from the Praia das Conchas (8/8/91) were presumed to be this species. On Príncipe, up

to 25 feeding around the Pedra da Galé (9/8/91). Large numbers (many 1000s) of *Sterna* terns on the Tinhosas islands (10/8/91) could possibly be this species¹⁰.

Brown Noddy *Anous stolidus* On Príncipe, up to 15 feeding around the Pedra da Galé (9/8/91).

White-capped Noddy *Anous minutus* On Príncipe, up to 15 feeding around the Pedra da Galé (9/8/91).

Feral Pigeon *Columba livia* On São Tomé, a few around São Tomé Town and Santo Antonio (2/8/91). On Príncipe, up to six around Santo Antonio (9-10/8/91).

Maroon Pigeon (Sao Tomé Olive Pigeon) *Columba thomensis* Species endemic to São Tomé. A total of four birds seen on two occasions in primary forest above the Rio Xufexufe (4-5/8/91). At Nova Moca a pair were seen feeding on berries in forest edge adjacent to old plantations (24/12/89), with another two singles in the same area (11/8/91). One in primary forest on the mountain summit at Lagoa Amelia above Nova Moca allowed very close approach.

São Tomé Bronze-naped Pigeon *Columba malherbii* Species endemic to São Tomé. Common in the dryer lowlands of the north-west, and probably prefers secondary forest. Outside this area, a few around Nova Moca plantations and Lagoa Amelia forest (23-25/12/ 89), three Porto Alegre (2/8/91) and ten along the Rio Xufexufe (5-7/8/91). Undertail coverts look chestnut in the field.

Laughing Dove *Streptopelia senegalensis* On both São Tomé and Príncipe common in the lowlands, becoming less common in the highlands.

African Green Pigeon *Treron calva* On Príncipe, at least 20 in small groups observed along the road between Santo Antonio and Bela Vista (9-10/8/91).

São Tomé Green Pigeon *Treron sanctithomae* Species endemic to São Tomé. Appears to be restricted largely to primary forest. Ten seen Lagoa Amelia (24/12/89) with several heard there (11/8/91). Along the Rio Xufexufe ten (3-7/8/91). Call resembles that of African Green Pigeon *T. calva*, but with the ending more regular and reminiscent of a telephone.

Lemon Dove Aplopelia (Columba) larvata On São Tomé, common in the higher forest of Lagoa Amelia with 20 daily (24-25/12/89). Otherwise uncommon, with three singles in forest along the Rio Xufexufe (2-5/ 8/91). Four in secondary forest near Praia das Conchas and two in beach scrub there (8/8/91). On Príncipe, two in primary forest above Bela Vista. Plumage of this species noted as extremely variable. Some had pale grey face, pinkish on sides of neck, vinous breast, pale belly with whitish undertail coverts, brown wings, dark tail with pale rim. Feet reddish. Some had entirely buff belly, while others had a dark grey head, dark maroon breast, brown wings and mantle, pale grey undertail coverts, iridescent pink nape, row of pale spots on wing coverts. None seen calling, but several heard: series of falsetto *hoo* notes repeated about twice per second.

Red-headed Lovebird *Agapornis pullaria* On São Tomé, ten in the northern savannas (23/12/89) and (8/ 8/91). Two at San Miguel (3/8/91) and two Santo Antonio (7/8/91) were in abandoned plantations near the coast.

African Emerald Cuckoo *Chrysococcyx cupreus* On São Tomé, a few heard daily in both lowland and highland areas (23-25/12/89), two heard from forest along the Rio Xufexufe (4-5/8/91). On Príncipe, two heard (9-10/8/91).

São Tomé Scops-Owl *Otus hartlaubi* Species endemic to São Tomé and possibly this or another *Otus* species present on Príncipe⁴. Up to six heard calling daily in lowland primary forest along the Rio Xufexufe (3-6/8/91), from about 40-250m altitude, including one seen nightly within the base campsite spotlighted down to five metres. Also heard from high altitude forest at Lagoa Amelia (11/8/91).

São Tomé Spinetail *Chaetura (Zoonavena) thomensis* Species endemic to São Tomé and Príncipe. On São Tomé, 15 in small parties in the northern lowlands (23/12/89) and (11/8/91), about five daily along the Rio Xufexufe (2-4/8/91), and six and four at Lagoa Amelia (24/12/89) and (11/8/91) respectively. Call was a very high pitched 'chip'.

African Palm Swift *Cypsiurus parvus* On São Tomé, only observed in the drier northern areas, with up to 30 daily around São Tomé Town. On Príncipe, up to 25 (9-10/8/91).

Little Swift *Apus affinis* On São Tomé, numerous around São Tomé Town and in the drier northern areas. The only other record was of 5+ birds near Santo Antonio (Sao Tomé) (2-3/8/91).

Malachite Kingfisher Alcedo (Corythornis) cristata I follow Snow¹¹ (1950) in regarding Alcedo kingfishers on both São Tomé and Príncipe as A. cristata. (Clements regards both as specifically distinct: São Tomé Kingfisher A. thomensis and Príncipe Kingfisher A. nais. Birds of Africa² consider the Sao Tomé bird to be C. cristata and the Príncipe bird to be White-bellied Kingfisher C. leucogaster.) On São Tomé, two on the coast near Praia das Plancas (23/12/89) and up to six daily along the Rio Xufexufe (2-5/8/91). On Príncipe, up to four along the Rio Papagaio between Santo Antonio and Bela Vista (9-10/8/91). **Blue-breasted Kingfisher** *Halcyon malimbica* On Príncipe, two around Santo Antonio (9/8/91).

São Tomé Fiscal Shrike Lanius newtoni Species endemic to São Tomé. One seen on two occasions (4-5/8/91) along a forested ridge at 220m altitude above the Rio Xufexufe at (0°09'N 6°31'E,). Other than the bird found by the UEA expedition in 1990⁵, this is the only sighting of this species since Correia in 1928. This bird was actually only about 1 km in a direct line from the earlier UEA sighting. In contrast to this earlier bird, which was found feeding on a dried up river bed, this individual was found within closed-canopy primary forest. The bird was initially seen as it flew from the ground, where it had been feeding, to perch on a small sapling about two metres up, where it was viewed for several minutes in good light. Crown, nape, mantle and wings glossy black with a white, broken line across the wing. Throat, chin, breast and belly yellow-orange. (This colour presumably fades soon after death, as museum specimens are white). Tail long and apparently forked with rounded tips, reminiscent of Asiatic forktails Enicurus spp., though whether this was the result of moult was not clear. Undertail blackish with three or four irregular off-white bars. Bill black and stumpy. Legs greyish. Stance very upright. When perched remained motionless before hopping down onto the ground to feed. Seen to feed on some small beetles. Once, when disturbed, ascended tangled vines into the lower canopy. Quiet and unobtrusive, which probably helps account for the paucity of records.

São Tomé Thrush *Turdus olivaceofuscus* Species endemic to São Tomé and Príncipe. A few in lowland forest areas and plantations in the north. Fairly common in forest above Nova Moca (24-25/12/89) and along the Rio Xufexufe (3-6/8/91) with at least ten daily.

Dohrn's Thrush-Babbler *Horizorhinus dohrni* Species endemic to Príncipe. At least 15+ daily (9-10/8/91) in cocoa plantation shade forest along the road between Santo Antonio and Bela Vista. Loud vocalisations strongly suggest that this is a turdine species. Study of this species highly recommended.

São Tomé Prinia *Prinia molleri* Species endemic to São Tomé. Widespread, recorded daily in all habitats including town and high altitude forest. Probably the most successful of the São Tomé endemics. The wing snapping displays are frequently observed.

São Tomé Short-tail *Amaurocichla bocagei* Species endemic to São Tomé. Up to ten daily (4-6/8/91) along the Rio Xufexufe from 40 - 350m altitude (the total altitude range covered). A poorly recorded species, collected regularly between 1892 and 1928, but with only two records since then^{5,12}. Most common on moss



São Tomé Fiscal Shrike *Lanius newtoni* by Mark Andrews

covered boulders along rivers at the edge of primary forest, but also several found some hundred metres from water within primary forest where it occurs on fallen logs and low branches within two metres of the forest floor. Quite vocal with a piercing call. The taxonomic affinities of this species are far from clear, and the most striking feature is the gait, which strongly resembles a pipit *Antbus* spp.

São Tomé Paradise Flycatcher *Terpsiphone atrochalybeia* Species endemic to São Tomé. Recorded from lowland shade and primary forest at all altitudes. Commonest along the Rio Xufexufe with at least ten birds daily (2-5/8/91).

Olive Sunbird *Nectarinia olivacea* On Príncipe, two (9-10/8/91) along the road between Santo Antonio to Bela Vista.

Príncipe Sunbird *Nectarinia hartlaubii* Species endemic to Príncipe. Five between Santo Antonio and Bela Vista (9-10/8/91).

São Tomé Sunbird *Nectarinia newtoni* Species endemic to São Tomé. Largely confined to primary forest. Commonly seen with at least ten daily along the Rio Xufexufe (2-6/8/91) and at Nova Moca (24-25/12/91) and (11/8/91). Otherwise only four individuals in the coastal lowlands, including one in a tree-lined avenue in São Tomé Town.

Giant Sunbird *Nectarinia thomensis* Species endemic to São Tomé. Only seen in primary forest along the Rio Xufexufe, both near and away from water (2-6/8/91) from 60 - 250m altitude. Seen feeding on both the nectar of flowering scrubs and probing the branches of larger trees.

São Tomé White-Eye *Zosterops ficedulinus* Species endemic to São Tomé and Príncipe. Only seen in areas of primary forest where it appears to prefer the edge. At

Lagoa Amelia four groups of 4-10 birds (24-25/12/89) and (11/8/91). Along the Rio Xufexufe four groups of 2-15 birds (2-6/8/91).

Príncipe Speirops *Nectarinia leucophaeus* Species endemic to Príncipe. Two birds in cocoa shade forest along the road from Santo Antonio and Bela Vista (9-10/8/91), with a further 12 in primary forest above Bela Vista (10/8/91).

São Tomé Speirops *Speirops lugubris* Species endemic to São Tomé. A few daily in lowland shade forest. Common in areas of primary forest, with several parties of 2-10 birds daily at Lagoa Amelia (24-25/12/89) and (11/8/91), and along the Rio Xufexufe (2-6/8/91).

Yellow-fronted Canary *Serinus mozambicus* On São Tomé, several in the drier northern areas (23/12/ 89) and one near Praia das Conchas (8/8/91).

Principe Seed-Eater *Serinus rufobrunneus* Species endemic to São Tomé and Príncipe. On São Tomé, common along the Rio Xufexufe, with 15 daily (2-6/8/91) and at Lagoa Amelia (24-25/12/89) and (11/8/91). A few seen in most forested areas on both islands.

São Tomé Grosbeak Neospiza concolor Species endemic to São Tomé. Two birds seen on two occasions (4-5/8/91), perched in a bare tree along a ridge within primary forest above the Rio Xufexufe, at 240m altitude (0°09'N 6°31'E,). This was the most important find of these trips, as this species had not been seen since 1890, when three specimens were collected by Newton. Without our observations, it would now be considered extinct by CITES criteria. Indeed, this hypothesis had been raised^{1,5}. On the first occasion, we observed one bird for about three minutes perched some 20m away, four metres above eye level on a dead branch within a small clearing. On the second occasion, the following day, we saw two birds briefly, one for about 30s in exactly the same place. The most striking feature of the bird was the large 'bull' head, 'chunky' build, and very thick bill, giving an appearance reminiscent of Thickbilled Weaver Amblyospiza albifrons or European Hawfinch Coccothraustes coccothraustes. Size estimated 17-18 cm. Plumage overall dark chestnut-black with underparts more rufous. Bill darkish horn. The plate in Mackworth-Praed and Grant¹⁰ gives a fair impression of the species, although the head is more 'bullish' than depicted. Full details of the rediscovery of this species are the subject of another paper¹³.

Chestnut-breasted Negro-Finch *Nigrita bicolor* On Príncipe, two birds on two occasions (9-10/8/91) along the road between Santo Antonio and Bela Vista.

Cordon-Bleu *Uraeginthus angolensis* On São Tomé, only seems to occur in the drier northern areas, where fairly common, including scrub in São Tomé Town.

Common Waxbill *Estrilda astrild* On São Tomé, common in the northern savannas, with 50 daily in suitable habitat. One group of 20 along the Rio Xufexufe (3/8/91). On Príncipe, fairly common along the road between Santo Antonio and Bela Vista (9-10/8/91).

Bronze Mannikin *Lonchura cucullata* On São Tomé, common in the drier northern areas. A few seen in the south-east along the coast road (2/8/91). On Príncipe, common around Santo Antonio and Bela Vista.

Príncipe Golden Weaver *Ploceus princeps* Species endemic to Príncipe. Abundant in all wooded habitats. The commonest bird on the island.

Vitelline Masked Weaver Ploceus vitellinus On São Tomé, fairly common in the drier north-east and northern savannas, including scrub within São Tomé Town.

Giant Weaver *Ploceus grandis* Species endemic to São Tomé. Up to six seen daily along the Rio Xufexufe (2-4/8/91). A few in overgrown plantations in the southern part of the island, and three around Santo Antonio (2/8/91) where it obviously nests. Elsewhere, four near São Tomé Town (23/12/89), two at Nova Moca (24/12/89) and ten there (11/8/91).

Red-headed Quelea *Quelea erythrops* Common in open grassland in the north-west of Sao Tomé between Guadalupe and Praia das Conchas (23/12/89).

São Tomé Weaver *Ploceus sanctithomae* Species endemic to São Tomé. A few in northern areas, and fairly common at Nova Moca and Lagoa Amelia.

Fire-crowned Bishop *Euplectes hordeaceus* Common in open grassland and scrub in northern areas of Sao Tomé.

Golden-backed Bishop *Euplectes aureus* Common in open grassland in northern areas of Sao Tomé (23/ 12/89), with males in full breeding plumage. One bird in non-breeding plumage near Praia das Conchas (8/8/ 91).

White-winged Widowbird Euplectes albonotatus Small groups totalling up to 50 birds in scrub around the town, and in grassland along the road near Guadalupe (23/12/89), with males in full breeding plumage. A few parties of non-breeding plumaged birds near Praia das Conchas (8/8/91).

Pin-tailed Whydah *Vidua macroura* Fairly common in the north of Sao Tomé, with up to 25 birds in grasslands and scrub along the road between São Tomé Town and Guadalupe (23/12/89), with males in breeding plumage. Three near Praia das Conchas (8/8/91) had not yet attained breeding plumage.

Chestnut-winged Starling *Onychognathus fulgidus* Two groups of one and three respectively in the northern lowlands of Sao Tomé (23/12/89). At least 12 over

four days along the Rio Xufexufe (2-5/8/91). Not present on Príncipe.

Príncipe Glossy Starling *Lamprotornis ornatus* Species endemic to Príncipe. Abundant in all wooded habitats.

São Tomé Oriole Oriolus crassirostris Species endemic to São Tomé. A total of 30 birds seen and heard in primary forest along the Rio Xufexufe (3-6/8/91). Otherwise only recorded in primary forest at Lagoa Amelia, where up to ten birds heard and seen (24-25/12/89 and (11/8/91), including a juvenile (25/12/89) which had heavy streaking on upper breast, no black on head and a large white eye-ring.

Velvet-mantled Drongo *Dicrurus modestus* Usually considered as a species endemic to Príncipe. However, here I follow Mackworth Praed and Grant¹⁰ in regarding the Príncipe birds *D. m. modestus* as conspecific with the mainland race of *D. m. coracinus*, itself often treated conspecific with Fork-tailed Drongo *Dicrurus adsimilis*. On Príncipe, two pairs along the road between Santo Antonio and Bela Vista (9-10/8/91)

Observations of three other species, *Fregata aquila*, *Sula capensis* and *Apus sladeniae*, which require confirmation, would be new for São Tomé and Príncipe.

Frigatebird spp. *Fregata spp*. Flying from Príncipe to São Tomé on 10/8/91, at least four frigatebirds *Fregata spp* were seen hanging over the Sooty Tern *Sterna fuscata* colonies on the Tinhosas Islands. There are no records of *Fregata spp* for São Tomé, though at least one record of Ascension Frigatebird *Fregata aquila* exists for Gabon.

Gannet spp. *Sula spp*. On São Tomé, an immature bird of either *S. capensis* or *S. bassana* observed from the beach at Praia das Conchas (8/8/91) flying past northward. There are no records of either of these species for São Tomé, though there is at least one record of *S. capensis*, the most likely species, for Gabon. Distinguished from immature Brown Booby *Sula leucogaster* by the absence of any pale patches on the belly, smaller size and different flight jizz.

Swift spp. Apus spp. In São Tomé Town, an individual Swift Apus spp. showing known characteristics of Fernando Po Swift Apus sladeniae was seen feeding low down around houses (7/8/91) in the company of Little Swift Apus affinis and African Palm Swift Cypsiurus parvus. We watched the bird in good light at eye level from a distance down to 20m for about 30s before it flew off. General size was that of European Swift Apus apus, with a blue-black body and showing no contrast on the upper wing surface of the secondaries. Tail fork shallower than European Swift. Little or no white on throat (none seen by four observers). European Swift is not known from Gabon, the closest African mainland, until late September¹⁴, (and pers. obs).

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